WHAT IS CLAIMED IS:

29. A method for loading a fibrous stock suspension containing cellulose fibers with calcium carbonate, comprising the steps of:

adding one of a calcium hydroxide in one of a liquid form and a dry form, and calcium oxide into the fibrous stock suspension;

adding gaseous carbon dioxide into the fibrous stock suspension;

precipitating calcium carbonate through said carbon dioxide;

refining the fibrous stock suspension during the loading method; and

washing the fibrous stock suspension at least one of after a crystallizing process, after the refining step, and during the refining step.

30. The method of claim 29, further including the step of washing the fibrous stock suspension prior to feeding the fibrous stock suspension into at least one of a headbox chest that is located downstream in flow direction of the fibrous stock suspension, and a machine for further processing of the fibrous stock suspension.

31. The method of claim 29, further including the steps of feeding the fibrous stock suspension into a press arrangement to squeeze out a filtrate from the fibrous stock suspension, and at least a partial returning of said filtrate into an arrangement for pulping the fibrous stock suspension.

32. The method of claim 31, wherein said filtrate is returned into a supply-side reservoir.

33. The method of claim 32, wherein said supply-side reservoir is a header tank.

34. The method of claim 31, wherein said calcium hydroxide is added at least partially in said arrangement for pulping of the fibrous stock suspension.

35. The method of claim 34, further including the step of maintaining a pH value of approximately between 7 and 12 at least in said arrangement for pulping of the fibrous stock suspension.

36. The method of claim 35, wherein said pH value is approximately between 8 and 12.

37. The method of claim 29, further including the step of using an aqueous fibrous stock material having a consistency of approximately between 0.1% and 20% as a primary raw material.

38. The method of claim 37, wherein said consistency is approximately between between 2% and 8%.

39. The method of claim 38, wherein said aqueous fibrous stock material is an aqueous paper stock

40. The method of claim 37, further including the step of mixing said calcium hydroxide into said aqueous fiber stock material whereby said aqueous fiber stock material has a solids content of approximately between 0.01% and 60%.

41. The method of claim 40, wherein said aqueous fiber stock material is a paper fiber stock.

42. The method of claim 29, further including the step of mixing said calcium hydroxide through one of a static mixer and a header tank.

43. The method of claim 29, further including the step of reacting said calcium hydroxide within a range of approximately between 0.01 seconds and 180 seconds.

44. The method of claim 43, wherein said range is approximately between 0.05 seconds and 60 seconds.

45. The method of claim 29, further including the step of mixing a dilution water into the fibrous stock suspension one of prior to, during and after at least one of said adding one of a calcium hydroxide and calcium oxide step and said adding gaseous carbon dioxide step.

46. The method of claim 29, wherein said carbon dioxide is mixed into a moist fibrous stock suspension.

47. The method of claim 29, further including the step of applying a refining energy in a range of approximately between 0.1 kW per ton dry paper pulp and 300 kW per ton dry paper pulp.

48. The method of claim 47, further including the step of controlling an energy supply by said refining step.

49. The method of claim 29, further including the step of utilizing at least one of a static mixer, a refiner, a disperger and a fluffer FLPCC reactor as a reactor, whereby a fibrous stock content is one of approximately between 0.01% and 15% in an instance of a static mixer; approximately between 2% and 40% in the instance of either a refiner and a disperger, and between 15 and 60% in the instance of a fluffer FLPCC reactor.

50. The method of claim 49, wherein said fibrous stock content is a paper content.

51. The method of claim 49, wherein said instance of a refiner, said fibrous stock content is approximately between 2% and 8% for LC refining.

52. The method of claim 49, wherein said instance of a refiner, said fibrous stock content is approximately between 20% and 35% for HC-refining,

53. The method of claim 29, wherein said precipitating step includes an expenditure of energy of approximately between 0.3 kWh/t and 8 kWh/t.

54. The method of claim 53, wherein said expenditure of energy is approximately between 0.5 kWh/t and 4 kWh/t.

55. The method of claim 29, wherein a process temperature is approximately between -15° C and 120° C.

56. The method of claim 55, wherein said process temperature is approximately between 20° C and 90° C.

57. The method of claim 29, further including the step of forming rhombohedral crystals, scalenohedron crystals and spherical crystals, of said calcium carbonate.

58. The method of claim 57, wherein said crystals measure approximately between 0.05 μm and 5 μm.

59. The method of claim 57, wherein said crystals measure approximately between 0.3 μm and 2.5 μm.

60. The method of claim 29, further including the step of utilizing at least one of static mixing elements and moving mixing elements.

61. The method of claim 60, wherein rotating mixing elements are utilized.

62. The method of claim 29, wherein said method is carried out in a pressure range of approximately between 0 bar and 15 bar.

63. The method of claim 62, wherein said pressure range is approximately between 0 bar and 6 bar.

64. The method of claim 29, wherein said method is carried out at a pH value of between 6 and 10.

65. The method of claim 64, wherein said pH value is approximately between 6.5 and 9.5.

66. The method of claim 29, further including a reaction time approximately between 0.01 seconds and 180 seconds.

67. The method of claim 66, wherein said reaction time is approximately between 0.05 seconds and 60 seconds.

68. A method for loading a fibrous stock suspension containing cellulose fibers with calcium carbonate, comprising the steps of:

adding one of a calcium hydroxide in one of a liquid form and a dry form, and calcium oxide into the fibrous stock suspension;

adding gaseous carbon dioxide into the fibrous stock suspension;

precipitating calcium carbonate through said carbon dioxide;

washing the fibrous stock suspension prior to feeding the fibrous stock suspension into at least one of a headbox chest that is located downstream in flow direction of the fibrous stock suspension, and a machine for further processing of the fibrous stock suspension.

69. The method of claim 68, wherein said precipitating step includes an expenditure of energy of approximately between 0.3 kWh/t and 8 kWh/t.

70. The method of claim 69, wherein said expenditure of energy is approximately between 0.5 kWh/t and 4 kWh/t.

71. An apparatus for loading a fibrous stock suspension containing cellulose fibers with calcium carbonate, said apparatus comprising:

a dewatering screw; and

an additional static mixer prior to said dewatering screw, said additional static mixer being provided in which the fibrous stock suspension is blended with at least one of a filtrate and a calcium hydroxide suspension.

72. The apparatus of claim 71, further including a pipe connected to a header tank which are connected to said dewatering screw, a fibrous stock suspension filtrate being yielded in said dewatering screw being returned through said pipe to one of said header tank and another preceding device for fiber stock preparation.

73. The apparatus of claim 71, further including an additional static mixer preceding a crystallizer, the fibrous stock suspension being washed in said additional static mixer.

74. The apparatus of claim 73, further including an additional washer after said crystallizer, said additional washer for cleansing of the fibrous stock suspension.

75. The apparatus of claim 73, wherein the fibrous stock suspension can be returned into said additional static mixer.